REMARKS

INTRODUCTION

Claims 1-48 were previously and are currently pending and under consideration.

Claims 1-48 are rejected.

Claims 4-12 are objected to.

Claims 1-12 have been amended herein.

No new matter is being presented, and approval and entry are respectfully requested.

OBJECTIONS TO CLAIMS AND SPECIFICATION

The abstract has been shortened to less than 150 words, and the grammatical formality of claims 4-12 has been corrected. Withdrawal of the objections is respectfully requested.

REJECTIONS UNDER 35 USC § 112, FIRST PARAGRAPH

In the Office Action, at pages 2-3, claims 1-48 were rejected under 35 U.S.C. § 112, first paragraph, for the reasons set forth therein. The Examiner alleged that the claim recitation of converting non-structured documents to structured documents is not enabled by the specification. It is respectfully submitted that conversion of unstructured to structured documents, for example Word, RTF, etc., in to SGML, was well known in the art at the time of the invention. For examples indicating that such conversion knowledge was readily available, see:

1) www.idle.org/lectures/xml/slides4.pdf (comparing unstructured documents to structured documents);

3) TagPerfect, a tool for converting RTF documents to SGML documents (http://www.deltacomputers.fi/deltatgp.htm), was available as early as November, 1995 (http://xml.coverpages.org/tagperf10.html);

3) Compilers, Aho, Sethi, and Ullman, 1988, which discusses various techniques for

parsing, lexical analysis, and syntax analysis, and combining these techniques for translation;

4) Adobe FrameMaker;

5) http://www.mds.rmit.edu.au/sim_2.1/ace-overview.html (available as early as 1998); and

6) http://citeseer.nj.nec.com/304616.html (Logical Markup from RTF), which discusses: "how to get logical structure from documents created by proprietary word-processors and stored into an RTF ... describes and evaluates all steps of conversion process from RTF to SGML/XML ... All used tools exist and are publicly available".

In sum, given a known non-structured document format (e.g. Word format, RTF, etc.), one of ordinary skill in the art will be able to apply standard language parsing and analyzing techniques to convert any document with the known format to a corresponding tagged document with a structure conforming to a pre-defined structure (e.g. an SGML document defined by a given DDT). It appears that the PTO agrees with the discussion above, because the primary reference (Hsu) used to reject the present claims also provides no discussion on how to convert to a structured document. Withdrawal of the rejection is respectfully requested.

REJECTIONS UNDER 35 USC § 103

In the Office Action, at pages 3-7, claims 1-48 were rejected under 35 U.S.C. § 103 as being unpatenable over Hsu in view of World Wide Web Consortium, *XML Schema Part I: Structures*, W3C Working Draft (May 6, 1999). This rejection is traversed and reconsideration is requested.

As amended, claim 1 recites "an original document storage directory", "a structured document storage directory". The directories are used for automatically preparing a hub document based on entity declarations, which refer to (e.g. reference) the structured documents. The Free Online Dictionary of Computing indicates that "directory" can mean: "<file system> A node in a hierarchical file system which contains zero or more other nodes - generally, files or other directories." In contrast, Hsu discusses storing the structured documents in a document database, which is not a directory. Therefore, Hsu also necessarily does not discuss the feature in the present claims of converting documents "in the original document storage directory", and

"automatically acquiring document names stored in the structured document storage directory and preparing corresponding entity declarations [i.e. references] referring to the structured documents", where the structured documents are in the structured document storage directory.

Support for "directory" may be found at least at page 17 (directories containing files and subdirectories), and Figure 3, showing directory "book1" with subdirectories "source", "sgml 1", and "graphic".

Furthermore, claim 1 recites preparing a "hub document", which serves as a hub in that it has entity references to instances of structured documents. A hub document is a discrete structured document, for example an SGML document. The rejection proposes modifying Hsu to automatically include entity declarations, however, this proposed modification of Hsu pre-supposes the existence of a hub document in Hsu. Hsu does not discuss or suggest a hub document as recited in the present claims. Rather Hsu binds a product manual based on binding information in the product documents that make up the product manual (see Figs. 1 and 9 of Hsu). The logical structure of the manual is "specified in the configuration specification" (col. 9, lines 6-9), which is defined using a product manual configuration specification language (PMCSL) (col. 2, lines 31-38; col. 9, lines 49-53). In sum, Hsu does not teach or suggest a hub document and the rejection does not provide any discussion of modifying Hsu to have a hub document. Hub documents are known prior art, but there is none mentioned in Hsu, and there is no reason to so modify Hsu, which uses a hierarchical structure of documents stored in a database and defined with PMCSL.

Furthermore, the rejection does not provide a motive found in the prior art that motivates the combining of the cited prior art references. The rejection states that "one of ordinary skill in the art would have recognized that basing a hub document on the entity declarations would have provided the benefit of flexible and efficient document preparation ..." (page 4, bottom - page 5, top). However, a motive to combine or modify prior art references must be found in the prior art. The provided motive is not found in the prior art, but rather is provided from the personal knowledge of the Examiner. An advantage found in the combination itself is not a motive found in the prior art. There must be a prior art suggestion for the desirability of the combination before the combination exists.

Also, the motive at the top of page 4 is not found in the prior art. It is respectfully noted that a document may be prepared or edited without requiring a new version of the document.

For example, if a document's attachment changes (e.g. an updated graphic), the version of the document may not change. With the present invention, the changed attachment will automatically be incorporated into the hub document (see claim 2, for example).

Withdrawal of the rejection of claims 1 and 2 is respectfully requested.

DEPENDENT CLAIMS

The dependent claims are deemed patentable due at least to their dependence from allowable independent claims. These claims are also patentable due to their recitation of independently distinguishing features. For example, claim 2 recites "if an attachment file is attached to the non-structured document, then the attachment file is stored into the attachment file storage directory and an entity declaration for referring to an entity of the attachment file is prepared and stored into the attachment file storage directory, and then the entity declarations regarding the attachment files stored in the attachment file storage directory are extracted and the hub document is prepared based on the entity declarations regarding the attachment files and the entity declarations regarding the structured documents". This feature is not taught or suggested by the prior art. Withdrawal of the rejection of the dependent claims is respectfully requested.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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